

# Comparisons of Job Characteristics

**Focus Occupation:** [Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters \(47-3015\)](#)  
**Associated Occupation:** [Heating, Air Conditioning, and Refrigeration Mechanics and Installers \(49-9021\)](#)

[Compare Knowledge](#)  
[Compare Skills](#)  
[Compare Abilities](#)  
[Compare Detailed Work Activities](#)  
[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 83

**Focus Occupation:** [Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters \(47-3015\)](#)  
**Associated Occupation:** [Heating, Air Conditioning, and Refrigeration Mechanics and Installers \(49-9021\)](#)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	20.1	12.8	<< Extensive education and/or training may be required
Building and Construction	4.0	12.5	14.3	> Current knowledge level is likely sufficient
Physics	4.3	11.4	5.7	<< Extensive education and/or training may be required
Engineering and Technology	5.7	11.1	7.2	<< Extensive education and/or training may be required
Design	5.2	10.3	8.0	< Expanded education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 66

**Focus Occupation:** [Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters \(47-3015\)](#)  
**Associated Occupation:** [Heating, Air Conditioning, and Refrigeration Mechanics and Installers \(49-9021\)](#)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Repairing	3.4	13.5	7.7	<< Extensive development of skills in this area may be required
Troubleshooting	4.5	13.3	5.1	<< Extensive development of skills in this area may be required
Installation	1.7	12.6	5.0	<< Extensive development of skills in this area may be required
Equipment Maintenance	3.5	12.3	4.7	<< Extensive development of skills in this area may be required

Operation Monitoring	6.6	11.4	4.2	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	11.2	5.6	<<	Extensive development of skills in this area may be required
Operation and Control	5.4	10.9	5.0	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	9.4	5.2	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 75

**Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)**

**Associated Occupation: Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)**

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Visualization	7.5	12.4	8.5	<<	Extensive improvement in abilities may be required
Extent Flexibility	4.8	11.8	11.0	0	Current ability level may be sufficient
Visual Color Discrimination	6.4	10.3	2.7	<<	Extensive improvement in abilities may be required
Hearing Sensitivity	5.6	10.0	2.0	<<	Extensive improvement in abilities may be required
Static Strength	5.0	10.0	8.6	<	Some improvement in abilities may be required
Gross Body Coordination	3.9	7.4	5.8	<	Some improvement in abilities may be required
Gross Body Equilibrium	3.2	7.1	6.1	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 92

**Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)**

**Associated Occupation: Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)**

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Apply cleaning solvents	41
Assemble and install pipe sections, fittings, or plumbing fixtures	71
Bend tubing or conduit	81
Cut, bend, or thread pipe for gas, air, hydraulic, or water lines	84
Fabricate, assemble, or disassemble manufactured products by hand	11
Measure and mark reference points or cutting lines on workpieces	66

Move or fit heavy objects	8
Repair or replace gas, steam, sewer, or water piping or fixtures	82
Use acetylene welding/cutting torch	54
Use basic plumbing techniques	72
Use hand or power tools	2
Use pipe fitting equipment	80

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 85

**Focus Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)**

**Associated Occupation: Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)**

Tools and Technologies	Exclusivity
Aerial lifts	13
Bandsaws and accessories	26
Cameras	2
Cleaning equipment	11
Compressors	9
Cutting and crimping and punching tools	3
Dispensing tools	6
Earth moving machinery	11
Electrical measuring and testing equipment	7
Face and head protection	7
Fall protection	16
Forming tools	2
Garden tools	12
Gas analyzers and monitors	10
Holding and clamping tools	3
Humidity and moisture measuring instruments	15
Indicating and recording instruments	2
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Metal bending and forming machinery	17
Metals and metallurgy and structural materials testing instruments	15
Non destructive examination equipment	13
Passenger motor vehicles	13
Personal communication devices	2
Power tools	2
Pressure measuring and control instruments	10

Prying and bending tools	10
Pumps	9
Rough and finishing tools	5
Sampling equipment	12
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Surveillance and detection equipment	11
Temperature and heat measuring instruments	6
Tool attachments and accessories	12
Transportation related equipment and instruments	29
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.